

**WHAT IS CLAIMED IS:**

- 1           1.       A tissue acquisition device useful in retrieving tissue samples from a
- 2     patient, comprising:
- 3                 an inner cannula having a proximal end, a distal end, and a longitudinal
- 4     axis extending between said proximal and distal ends, said inner cannula including a
- 5     tubular sidewall, a main lumen extending along said longitudinal axis from said
- 6     proximal end toward said distal end, and a cutout in said sidewall;
- 7                 an outer cannula having a proximal end, a distal end, and a longitudinal
- 8     axis extending between said proximal and distal ends, said outer cannula including a
- 9     tubular sidewall, a main lumen extending along said longitudinal axis from said
- 10    proximal end toward said distal end, and a cutout in said sidewall;
- 11                a passageway extending longitudinally along said device from said
- 12    proximal end toward said distal end;
- 13                a cutting wire positioned in said passageway, said cutting wire having
- 14    a proximal end and a distal end and being rotatable and longitudinally extendable in
- 15    said passageway, said cutting wire including a cutting loop at a said distal end which
- 16    extends out of said passageway;
- 17                wherein said inner cannula is positioned in said outer cannula main
- 18    lumen with said inner cannula cutout positioned at the same longitudinal position as
- 19    said outer cannula cutout.

1           2.       The tissue acquisition device in accordance with Claim 1, wherein said  
2 inner cannula cutout and said outer cannula cutout are both radially and longitudinally  
3 aligned.

1           3.       The tissue acquisition device in accordance with Claim 1, wherein said  
2 inner cannula cutout and said outer cannula cutout are substantially the same size and  
3 shape.

1           4.       The tissue acquisition device in accordance with Claim 1, wherein each  
2 of said inner cannula cutout and said outer cannula cutout include two longitudinally  
3 extending sidewalls, a proximal endwall, and a distal endwall, and wherein both said  
4 distal endwall and said proximal endwall are each substantially perpendicular to said  
5 sidewalls.

1           5.       The tissue acquisition device in accordance with Claim 1, further  
2 comprising an end plug mounted at the distal ends of said inner cannula and said outer  
3 cannula.

1           6.       The tissue acquisition device in accordance with Claim 5, wherein said  
2 end plug is mushroom-shaped, including a dome-shaped portion and a cylindrical  
3 portion.

1           7.       The tissue acquisition device in accordance with Claim 5, wherein said  
2 end plug comprises a cutting wire extending distally from said end plug and separated  
3 from said end plug by a gap, said cutting wire including a connecting portion  
4 embedded in said end plug, extending proximally through said end plug, exiting said  
5 end plug cylindrical portion, and reentering said end plug cylindrical portion, said  
6 cutting wire including a free end opposite said connecting portion which is embedded  
7 in said end plug.

1           8.       The tissue acquisition device in accordance with Claim 5, wherein said  
2 end plug comprises a cutting wire extending distally from said end plug and separated  
3 from said end plug by a gap, said cutting wire including a connecting portion  
4 embedded in said end plug, extending proximally through said end plug, and exiting  
5 said end plug proximally, said cutting wire including a free end opposite said  
6 connecting portion which is embedded in said end plug.

1           9.       The tissue acquisition device in accordance with Claim 8, wherein said  
2 inner cannula further comprises a conductor extending through said inner cannula  
3 sidewall from said proximal end to said distal end, said conductor having a distal end  
4 in electrical contact with said end plug cutting wire.